MACDONALD COLLEGE
Journal DECEMBER ol. 2 · No. 4



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EDITORIAL COMMENT

Christmas 1941

Surely the Bethlehem story is the most beautiful story that has ever been told. Sometimes in our moods of exalted reason we have taken ourselves too seriously and have said there was no Angel Song. Sometimes the buying and selling of many things has kept us from lifting up our eyes unto the Star. Sometimes the news of battle has made us say, "It cannot be."

But to the common men and women, still too near the heart of things to be spoiled by cynicism, still too conscious of the Divine Presence in a stricken world ever to lose their faith in the ultimate goodness of things, the shining Star and the Angel Song have never ceased to proclaim their message of Peace and Good Will.

Something happened that first Christmas day over nineteen hundred years ago, and the world has never been the same since. And that dream that was born at Bethlehem must someday be fulfilled. Even if the time of its fulfilment still seems a long way off, we can do so much to help prepare the way for its coming. Let us for instance, count our blessings, God, home, freedom, good will, the spirit of live and let live — and yes, our undarkened windows that will throw the colored lights of countless Christmas trees across the pure white snow. And let us learn still further the blessings and contentment when men and women work together for the common good, co-workers in field and factory, in forest and office, in school, and church, and home.

We in Canada are a people of many races, faiths, and creeds. We have something in our hearts and lives that this poor old world badly needs. Perhaps as faith in God stands fast, and more and more we learn the secret of working together for the good of all, we may be amongst those who help a lost world to find the guideposts on the foothpath to peace.

—Contributed



We would call the attention of our readers to our leading article this month. This is a summary of the highlights of a discussion which took place on the closing day of the Listening Group Leaders' Conference, and brings out some points of view which are very interesting. Also of interest to some of our readers will be the Provincial policy of assistance in the purchase of hay for this winter's feeding which is announced this month.

We are told that already 450 butter and cheese factories are co-operating with the Provincial War Savings Committee and have arranged to collect from their customers a certain amount each month to be applied to the purchase of War Saving Certificates. This is a simple way to save a definite amount regularly and we commend the plan to all our readers who are in a position to take advantage of it.

Christmas is almost here. Are you still racking your brain trying to think of a present for this one and that? If so, may we suggest that a subscription to the Journal may be the solution to your problem.

To all our friends, the Journal extends the old wish — A Merry Christmas and a Happy New Year.

The Feed Grain Situation

Extracts from discussion on this important subject by delegates to the Listening Group Leaders' Conference.

T THE Listening Group Leaders' Conference held at Macdonald College November 10th to 14th, delegates from all parts of the province discussed various problems of vital interest to them. As already explained in this issue, the last day's session was turned over to the members of the group to run themselves, without the intervention of the College staff. First of all, there was a keen discussion of the subject to be chosen as the topic of the meeting. Finally, with the casting vote of the Chairman, the subject of the new freight subsidy on certain grains and current trade practices was decided upon. A committee of the delegates drew up a series of questions to focus the discussion, and members with the greatest experience in each field were commissioned to "dig up" material from all available sources, in order to give substance to the ensuing discussion.

When the group convened under the chairmanship of Mr. George Collum of Ormstown, these questions were introduced by one of the chosen leaders and fully discussed by the group, following which the secretary of the group drew up an answer to the question on the basis of the combined contributions of the group.

The discussion proved one thing very clearly, viz., that there was a good deal of fragmentary information and misinformation on subjects of vital importance to our farmers. Furthermore, the method employed proved to be of real value in combining known facts and clearing up misconceptions.

While the *Journal* cannot guarantee the complete accuracy of all the conclusions, they are believed to be substantially correct and it is felt that the publication of the group's findings will be of great interest in indicating the results that can be achieved by the discussion method. Incidentally, further discussion of this particular topic may tend to result in a better understanding of the situation.

It was the unanimous view of the members of the Conference that the questions and answers as brought out in the discussion should be published in the *Journal*. These are, therefore, given in full below as prepared by the Secretary:

Question 1. What are the details of the new freight subsidy on Western feed grains and how will it work out in practice?

The discussion of this question brought out the following facts:

Under Order-in-Council P.C. 8396, dated October 28th, 1941, all feeders of livestock and poultry in Eastern Canada are classified as consumers and are entitled to full freight assistance.

This means that reimbursement of freight charges is allowed on all Western wheat, oats, barley, rye, No. 1 feed screenings and No. 2 feed screenings, bulk or bagged, whole and/or ground, and on wheat bran, wheat shorts or wheat middlings made from Western wheat.

The amount of freight assistance is \$4.50 per ton on any shipment made within the Montreal freight rate zone. On shipments made easterly beyond the Montreal freight rate zone, additional freight assistance is given, which is the balance of the actual carlot through freight charges from Fort William, Port Arthur or Armstrong, Ontario, to destinations on either the Canadian National Railway or Canadian Pacific Railway. For example, if the through carlot rail charges from Fort William to unload point is 40c per hundred pounds, there will be additional freight assistance of 15c per hundred pounds, or \$3.00 per ton allowed. This would make a total of \$7.50 per ton allowable of the contents of the car.

When the consumer buys his feeds from the local dealer, the freight assistance must be allowed him by the dealer in the selling price of the product. If, however, a consumer purchases and receives a *shipment direct* from Western Canada (Fort William and/or Port Arthur terminals) he will make his own claim. A special form (A.S. B. 16) is available for this purpose. This form must be completed in every detail and forwarded together with the original invoice received from the seller, and the railway company's receipted freight bill, to the Treasury Office, Department of Agriculture, Ottawa, Ontario.

The retailer or retail dealer means one who deals in or sells feeds *solely* to consumers.

When a retail dealer or consumer buys from stocks of Western grains already in store in Eastern Canada, whether brought down by rail or water, the seller will allow the freight assistance and show on his invoice the amount of freight allowed. The freight assistance policy was enacted for the benefit of the consumer, and the *full benefit* of it must be passed on to him.

If a retail dealer manufactures mixed feeds, he should write for further instructions and forms which will be supplied to cover his operation and any claim to be made against the Western grain content of the mixed feeds. Formulae covering the percentage of the individual Western grains as well as the total percentage of such grains must be submitted to the Treasury Office, Department of Agriculture, Ottawa.

When a dealer sells mixed feeds (manufactured by other than himself) to another dealer or consumer, there will be no freight allowance to consider, because the freight assistance has already been taken into account in the selling price by the manufacturer of such mixed feeds.



Delegates to the Listening Group Leaders' Conference, November 10-14.

When the dealer and/or consumer takes delivery of the grain or feeds by truck or boat at any point in Eastern Canada, there will be no freight or transportation assistance allowable beyond the delivery point to such trucks or boats.

The period for this freight assistance covers shipments from Western Canada between October 19th, 1941, and June 30th, 1942.

The above Order-in-Council rescinds a former Order passed September 25th, whereby one-third of the freight allowance was granted on Western shipments made from October 1st to October 18th, and bona-fide claims, against which sales to feeders have been made on the basis of one-third of freight allowance, may be entertained, but satisfactory evidence will be required by the Treasury.

All claims must be submitted only on such forms as are prescribed by the Administrator, and individuals may procure the same by writing to: The Flour and Feed Administrator, Department of Agriculture, Ottawa.

Question 2. Just what is the practice of "degrading" and is it contrary to existing legislation?

Discussion of this question produced the following answer:

What is commercially known as "degrading" grain is interpreted as an operation to obtain a change in the original grade. This change may be resorted to in building up higher grades as well as lowering other grades which have been given on certain grains at their primary official inspection, or prior to their shipment to the Lakehead or terminal elevators for storing and cleaning, etc. Therefore, it is an operation concerning mostly a well equipped elevator with modern conveniences under capable management, and it was said to have been recently admitted by an official of a large terminal and prairie elevator organization that "degrading" was recognized as a common or every day practice. Therefore one must conclude that there is no violation of present legislation or the Grain Act in so doing.

For example, the standard barley grades must not exceed

14.9% moisture, but if a terminal elevator receives two cars of barley testing 15% and, therefore, graded "tough", and mixes these two cars with another one of standard grade testing only 13% or 14% moisture, the result will be three carloads of standard grade barley after re-inspection.

Similarly, two cars of grain which have just missed the No. 3 C.W. inspection, owing to a slight excess of weed seeds, wild oats, etc., permitted in this grade, would automatically take the next lower grade; but if the two cars are mixed with an extra good car of 3 C.W. — the three cars could then probably reinspect No. 3 C.W. Such practices are profitable when the higher grades command a premium, as at present.

Similar benefits may be derived (as in most cases) in "degrading" to lower standards or grades, which enables the elevators to dispose of accumulated scalpings, seeds or chaff, within the limits or tolerance of the law. For example, No. 1 feed barley must not exceed 4% wild oats, but No. 3 feed barley tolerates 20%. If the price per pound of wild oats is much lower than that of barley the hospital or terminal elevator is naturally encouraged to stream 16% wild oats into No. 1 feed barley and degrade it to a No. 3.

This development indicates that greater competition in the grain and feed business, coupled with a probable lack of education among feeders, has created a keen demand from retailers for lower grades in order to undersell competitors. This has been used to feature bargains to undiscriminating "feed shoppers". This has proved more profitable to expert "degraders" than to consumers, judging from the unusually narrow spreads between low and high grades at present prevailing.

Question 3. Is it in the interest of the Eastern buyer? The discussion of this question brought out the opinion that this results in the following:

1. The purchase of lower quality feeds.

(continued on page 18)



AGRICULTURE

Articles on problems of the farm

Nutritional Anaemia in Pigs

by Veterinarius

The protection of the health of the pig during its first few weeks of life often determines the difference between profitable and unprofitable development.

I RON deficiency, with the resultant anaemia and serious unthriftiness in young pigs, is now recognized by many farmers as a distinct danger and steps are taken to prevent its occurrence. However, the occurrence of anaemia in litters born during the cold months, and hence kept indoors during their early life, is still far too common and losses from this disease are greater than they seem to many owners. Further consideration of the underlying causes, the results and the adjustments, seems to be in order.

The young pig has to keep up the process of building blood at a tremendous rate. In order to stay at a normal level the blood production must keep pace with the growth of the rest of the body, therefore the original volume must be multiplied in proportion. Many of the materials needed to build blood are obtained from the milk of the sow, but this source lacks one important item — iron. The red matter of the blood, haemoglobin, which is the essential substance for conveying oxygen and waste matter, is an iron compound. Unless there is an adequate supply of iron, haemoglobin cannot be formed, and a cell with an inadequate supply of haemoglobin cannot function normally and is soon destroyed by other body tissues. Finally, the organs which form the blood cells cease to produce normal numbers and the blood becomes low in cells and haemoglobin and all tissues of the body are deprived of essential supplies. When the supply lines are cut, enemy invaders of the body are enabled to achieve an easy victory.

Under natural conditions rapidly growing young animals such as pigs are able to obtain an excellent supply of iron and other substances from the soil. Modern pig husbandry removed this source when it built wooden and concrete floored pens and raised litters indoors. The obvious remedy is to supply iron to the pigs through the mother before they are born and then, later, to see that they have an extra supply as a supplement to sow's milk; the danger period is between the time that the reserves in the liver, bones, etc. are used up and the time when solid food provides adequate iron.

From the above it will be seen that the faster the newly born pig grows the greater are its needs for iron and the more likely it is to get anaemia. This, in practice, is actually the case, for it is the large fat piglet which first becomes pale, dirty and somewhat abnormally plump

around the neck and shoulders. As the anaemia progresses the affected animals become dull and listless and shake as if badly chilled. A thumpy sound of breathing is noticed and this may progress to a chronic cough. Diarrhoea is a common result. The disease may not progress as far as to produce such violent symptoms, however, particularly if the lack of iron reserves occurs shortly before the piglet is ready to eat solid food. In such cases the results are not well known, but it is probable that greater susceptibility to other diseases and a bad effect on the rate of growth occur.

Preventive Measures

We often hear the very true adage, 'prevention is better than cure,' but we cannot find a better example of its application than in the protection of litters against nutritional anaemia. The methods are simple, cheap and effective; they should certainly be adopted by every farmer who raises pigs in buildings. The first step is to include an extra supply of iron in the feed of the sow, so that a good reserve can be stored in the bodies of the pigs before they are born. Iron (ferrous) sulphate, is a cheap commercial form, and is excellent for this purpose, as this product contains traces of copper as an impurity, but which is valuable in the utilization of the iron. A sow should have enough of this iron salt mixed in the feed so that she will consume about one ounce in three weeks.

As soon as the litter is born, plans should be made for an available supply of iron for the piglets. A very simple method is to place a sod in the pen, preferably behind a creep, each day. The sod can be lightly sprinkled with about one ounce of a solution made with one teaspoonful of iron sulphate in one half gallon of water. If sods are not available, a shovelful of soil is a good substitute; the soil should likewise be sprinkled. Veterinarians often dispense small pills of capsules which contain about 2 grains of iron, and which can be given to the pigs when they are a day or two old and again when they are a week or ten days old; this is a sure and accurate method.

Anaemia can be cured by dosing with iron, using iron sulphate or reduced iron. An amount that will cover a tencent piece is about correct. However, if anaemia is allowed to develop it may cause irreparable damage, so prevention should be the key-note of the programme.



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Straw to Waste?

Although nowadays we have come to value straw much less as a filler for bed ticks and cows' bellies than formerly, it has still some important uses on the farm. When land is used for grain production there is a definite need to have the straw put back into the soil in some form or other. It should not be blown into a pile where it is threshed, to be burnt, sold or allowed to waste away.

Many of us can recall the time when prairie farmers in western Canada thought they had "straw to burn." Later experience, however, proved the folly of burning straw and emphasized the need for putting it back into the land to keep the good surface soil from blowing away. While we may never have to contend with soil drifting in eastern Canada, it is doubtful if we can get along without the soil humus which straw can provide.

Humus is that dark-brown, powdery material that gives the dark colour to surface-soil. It is needed by the lighter soils to keep them from drying out too quickly in midsummer, and by heavy soils to provide better aeration during spells of wet weather and to lessen the tendency which they have to become hard and baked during dry spells.

In all soils it plays an important part as a storehouse for reserve nitrogen.

The value of humus shows up in dry seasons. This past summer many parts of southern Ontario and Quebec have been unusually dry and new seedings have produced the poorest stands with which farmers have been faced for many years. It is in such seasons as this that soils which are well-stocked with humus show their ability to produce better crops of grain and better stands of timothy and clover than where there is a lack of it.

Keep up Soil Humus

Soil humus disappears more quickly from some soils than others. On some it is therefore more necessary to give special attention to practices which will maintain a satisfactory supply. The return of the straw to the soil in the form of manure is the most practical way of doing this.

On farms where a considerable number of live stock is kept, bedding is likely to have the most important claim upon the farm's straw supply. Proper bedding serves a two-fold purpose: it provides comfort and cleanliness for the animal and absorbs the valuable liquid part of the manure which might otherwise drain away and be lost. The amount of bedding needed may be expected to vary in different stables depending, among other things, upon the nature of the straw. Most of the modern threshing machines do a pretty good job of breaking up the straw if it is not too tough when threshed. Broken or cut straw makes better bedding since it remains in place better and is less easily kicked aside than long, coarse straw; it is also capable of absorbing much more liquid and makes the manure more compact and easier to handle.



There is likely to be quite a definite relation between the straw yield of a farm and the way in which the manure is handled. Manure which is well-preserved and applied so as to give the best returns will do much to keep up the yields of straw as well as grain. Proper handling of manure should therefore help to furnish a good supply of straw which if properly used, should in turn assist in preventing losses from the manure.

Use as Feed

A second claim which the farm may have upon its straw supply is for its use as feed. Although of low feeding value compared with most of other roughages, wellpreserved straw may have about the same feeding value as some of the poorer grass hays. Oat straw is usually considered superior to that of the other grains for feeding purposes. Its value, however, may be expected to vary considerably due to differences in seasonal and soil conditions and to weather damage while in the stook. The more completely the grain ripens the more thoroughly the food materials will be removed from the straw. It may, therefore, be expected that those varieties which do not ripen properly or those seasons that do not allow proper ripening of any variety will furnish straw of higher feeding value. On the other hand, showery weather while the crop is standing in the stook may result in straw that is too dirty, musty or dusty to make satisfactory feed.

It is doubtful if straw has any place in the feeding of milch cows, growing and fattening animals and working horses, but it may well furnish a considerable part of the feed for wintering idle horses and beef breeding cows. If the stock can help themselves to the straw they will eat out the finer, more easily digested parts and the coarser parts which they refuse will serve as bedding and become tramped into the manure. The presence of clover in the butts of sheaves from newly-seeded grain fields may greatly improve the feeding value of such straw.

Cash-Crop Farms

On stock farms there is not likely to be any surplus of straw such as may occur on farms where cash-crops are grown and few stock kept. On the latter there is an urgent need for ensuring the return of the straw to the soil in some form or other. The combine harvester which has already made its appearance in many districts of Ontario and Quebec goes a step further than stook-threshing as it leaves the straw scattered back over the field. While this is undesirable on farms where it has to be gathered up again for bedding or feed, it ensures the return of the straw to the soil on those farms which do not need it for these purposes.

Heavy crops of straw when plowed back into the soil may have quite an unfavourable effect upon the crop which follows. This is explained, in part, by the fact that the soil is left too open and therefore subject to drying out in dry weather. The following crop may also suffer from a lack of nitrogen due to a temporary removal of the available soil nitrogen by bacteria which multiply rapidly and bring about the decay of the straw in the soil. This lack of nitrogen is likely to be more serious when non-legume crops, like grain or corn, are grown, since they are wholly dependent upon the nitrogen in the soil for their supply. The lack of nitrogen can, however, be overcome by applying some form of nitrogen fertilizer on the straw and stubble before it is plowed under, or later on, when the following crop is seeded.

Whether the crops of the farm are marketed directly for cash or through the medium of animals or animal products, there is an urgent need of returning the straw to the soil. If properly used as bedding it may carry back with it a large part of the valuable liquid manure so often lost from stables and manure piles. Where only a few stock are kept, as on cash-crop farms, the best that we can do is to return the straw supplemented by the use of such commercial fertilizers as will help to make up for the lack of manure.

Remembrance Day brought a surprise to Donald Darling, poultry farmer, of Kenmore. One of his several hundred hens, a Leghorn, laid a white egg, which was not, of itself, a surprise. But this egg was "different". On one end of it was a distinct "B" in raised outline and nearly three-quarters of an inch long. Mr. Darling is sure the symbol was meant to stand for "Britain".

ALUMINUM

Frying pan, frying pan, where have you been?
I've been to London and back again;
I'm part of a bomber that flies o'er the sea—
Who'd ever have thought that could happen to me!
T. R. Bone



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Another War Need – Egg Quality by N. Nikolaiczuk Quality

THE British Ministry of Food and Supply has given the Canadian poultry industry repeated orders of 5,400,000 eggs each. These consignments have been filled in terms of quantity. But what of quality? The official announcement by Dominion authorities states that the first contracted shipment consisted of 60 per cent Grade A and 40 per cent Grade B eggs. Is this to be taken as an index of the quality of produce which Canadian poultrymen are capable of offering for export overseas? If so, then there is plenty of room for improvement. At the time of writing a new order has just been generally announced — 1,000,000 cases, approximately 30,000,000 dozens, have been requested to be shipped by May 31, 1942. After supplying the local demand of consumption and hatching, will there be sufficient eggs of the highest quality for export?

Any effort to produce eggs of better quality has been well paid in the past. Price differentials upon the basis of grade have always been sufficient to offset the additional cost of production and no doubt they will be for this winter.

What is Egg Quality?

Our scheme of Canadian egg grades is simple enough and is generally appreciated because that is the basis of payment. The quality factor, however, is more obscure. It is that condition of shell and contents of eggs which can be marketed in such a manner as to give greatest satisfaction to the consumer and thereby the greatest revenue to the producer. Encased within a clean, sound shell, the internal contents, as seen through a candling device, should appear as follows: a small air-cell fixed at the large end of the egg, a clean firm albumen carrying no foreign particles with a faintly visible globular yolk of uniform yellow-orange colour in the centre. Flavour is a factor that cannot be determined except by taste, but is vitally important. Quality is a changing condition within each egg which is at its best at the time of laying. The choice condition can only be maintained but not improved, except by proper management of the laying stock beforehand. The best of handling after the egg is laid can only lessen the speed of deterioration and so maintain the choicest state for the consumer.



How is Egg Quality Lost?

Eggs in their fresh state are one of the most perfect natural foods. Though 65 per cent water and 10 per cent egg shell, they contain an abundance of fat, protein, vitamins and minerals. Unfortunately, the substances contained within are liable to changes through factors such as temperature and humidity. Food value and good flavour are affected to the greatest extent.

Feeding Will Bolster Egg Quality

At the outset it should not be overlooked that general egg quality can be raised by supplementing the diet. The hen has the native ability to transfer certain food nutrients in greater quantities to the egg if the diet permits. This applies to certain fat constituents, vitamins A and its mother substance, vitamin G and some minerals.

Experimental evidence suggests that firmer egg albumen can be obtained by the use of more animal protein supplements. Better egg quality thus obtained by fortification from the feed ensures greater reserves in the egg, despite the losses that are likely to occur.

Changes in Storage

Under ordinary storage conditions, where the air is dry, the loss of water from the egg is rapid and can be followed by a constantly enlarging air-cell. Higher temperature increases this loss to excessive proportions. Humid storage accommodation will minimize this evaporation.

This watery albumen has no elasticity, becomes watery clear and provides no central support for the yolk sac, which then sinks to the internal surface of the shell membranes. Prolonged periods without movement lead to the condition known as "stuck yolk". Temperatures above 69°F. will start embryo development in fertile eggs; lower temperatures are therefore desirable.

Larger air-cells through loss of egg water lead to greater air interchange in the egg. The presence of oxygen produces a breakdown in the structure of fats, vitamins and minerals. Mottled yolk is evidence of change in the yolk fat. Long before the well known odour of bad eggs is present, much of the loss of the other valuable constitudents has occurred. At that late stage every semblance of egg quality has disappeared.

The loss of flavour is a progressive change from delicately attractive to decidedly objectionable. The original mild mixed-nut flavour charactertistic of fresh eggs is the blended product of many aromatic fats. Rancidity of these fat-like substances, combined with the stench of released sulpher compounds, produces flavours which soon replace, under adverse conditions, the attractive flavour sought in fresh eggs.

Filth, adhering to the shell as smudge, stain or mass, causes unfavourable complications. Poor egg shells, due to

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improper feeding, hasten the entry of these organisms. Under storage of the best kind molds and bacteria from such a source will penetrate the egg shell and contaminate the contents. In all instances, the quality loss is rapid.

Practices that Insure Only the Best

The use of recommended and balanced rations is imperative. Protein, vitamin and mineral supplements will pave the way for fortified eggs. Access to oyster shell or grit at all times is a wise practice. Strong shells limit porousness and lessen breakage in handling.

Dirty houses and filthy litter leave odours which the best of ventilation will not remove. Eggs absorb odours; filth will be carried to the nests; some quality will, therefore, have been sacrificed before the eggs have left the laying house.

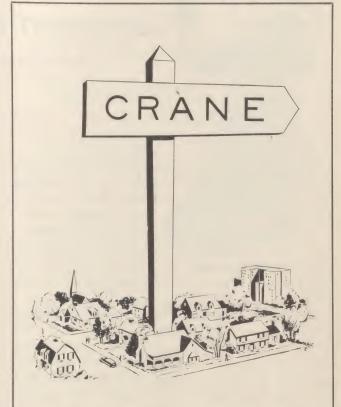
All male birds should be removed from pens where eggs are to be collected for the fresh trade. Fertilized eggs will undergo germ development by the action of the body heat of other layers while in the nest. More rapid deterioration thereafter cannot be prevented.

Frequent gathering, three to four times daily, prevents soilage, breakage and the absorption of off-odours and allows rapid cooling after the eggs are laid. Gradual reduction from body to storage temperatures are suggested to prevent sweating. The formation of moisture on the shell destroys the outer covering of the shell and thereby the storage quality of the eggs.

Fresh, well-ventilated quarters possessing high humidity, (about 75 per cent), cool temperature (55 to 60 degrees Fahrenheit) and no foreign odours will provide the best farm conditions for holding market eggs. A basement room often meets these requirements admirably. Upon cooling, all eggs should be packed in regulation cases, large end upward and with sufficient padding to permit safe shipment. Cracked and soiled eggs should not be packed with the sound ones. Sandpaper, steel wool or wire brush will best remove spots, stains or filth. Cases containing eggs should be canted daily by raising opposite corners.

At the National Dairy Council meeting recently the proposal was made that the minimum fat content for ice cream, now set at 13 per cent, should be reduced to 10 per cent, so as to release more milk for cheese making. If we are to produce 150 million lbs. of cheese for Britain next year, we may have to do without ice cream entirely.

Stories of giant pumpkins grown around Belleville, Ont., and weighing up to 130 lbs., have been matched by a Vancouver backyard gardener who has pulled a parsnip weighing five pounds and measuring 4½ inches across the top and two feet long. It served the family for two or three meals.



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CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

CREDIT UNION FINANCES ELECTRICITY CO-OP

The small community of Compton Station, P.Q. in the Eastern Townships, is the first rural group in this Province to get its electricity through co-operative action. Its experiences will be useful to many other groups facing the same problem. A visit there and a talk with the secretary Mr. J. W. O. Proulx, brought out the following facts.

The group is made up of nine households at Compton Station, and three non-members buying electricity from the group. The station community is one and a quarter miles from Compton village, which has had electricity for many

Application was made by the Compton Station group to the Southern Canada Power Company to build a line to serve them, but the charge which would have been made by the Company after building the line for serving that number of households was higher than they could afford. The group then applied to the Quebec Public Services Board and a surveyor was sent down, and on the basis of his report the Board declared that if fourteen members could be found to take electricity then the rate should be two dollars less than that estimated by the S. Canada Power Co.

It was not found possible however, to get this number of members, so in 1938 the group took action on their own behalf and decided to build for themselves. The necessary capital was raised through notes on the Compton Caisse Populaire. All equipment was bought from the Northern Electric Co. in Sherbrooke. The members — farmers — built two and a quarter miles of poles, but for the expert work of wiring and putting in transformers they employed the Southern Canada Power Co. The Company also supplies the electricity.

The total cost was \$2464 — a great deal less through doing it themselves than it would have cost the Company. Mr. Proulx says that if they were to do it again they could do it for less still after the experience they have gained in building.

In 1940 the society's revenue amounted to \$481.81 and the costs that year were \$215.61, leaving them with a small balance towards the paying off of the debt on the line. There is a fixed monthly charge of \$1.50 to those using the line, plus dues. The Southern Canada Power Co. charges the society the domestic rate giving the usual discount. It would seem that the group is a desirable unit for the Power Company to serve, seeing that it pays the full domestic rate but has built its own line and employs the Company for technical work and repairs. The Company thus receives revenue from it without incurring the expense of building and upkeep.

The society — full name: La Société Co-opérative Agricole de Distribution d'Electricité de Compton Station — now has nine members. One of the three non-members buying from it is the C.N.R. which now has a station well-lighted by electricity, where before this was done by kerosene lamps.

It is hoped to pay off the line in a few years if all goes well and application will then be made to the Quebec Public Services Board for permission to lower the rates to

the members.

BRITISH CO-OPS COME THROUGH

Employers everywhere in Great Britain have been faced with the problem of replacing workers who have gone on active service.

Great Britain's biggest employer is the Consumer Cooperative movement, which up to July 1939 employed over 350,000 workers. Today 150,000 of these employees are in training or on active service in the army, navy or air force.

Volunteers have come forward in thousands to take their places. Brides, who before marriage were perhaps typists or cashiers, and whose husbands have joined up, come to help, glad of the extra pay and glad also to find themselves doing more responsible work. Pensioners who had retired expecting to live in peace for the rest of their lives have offered their services to the movement again, bringing with them the contribution of their years of experience.

It is a tribute to the resilience of the movement that it is so successfully adjusting to the conditions brought about by the war.

Characteristics of a Joint Stock Company and a Co-operative Association

Joint Stock Company

Co-Operative Association
OBJECTS:

Profit.

To effect savings.

MEMBERSHIP:

Anyone who buys stock.

Those who patronize the association.

OWNERSHIP OF SHARES:

No limit.

Definite limit.

VOTING POWER:

According to number of shares.

One man, one vote. No proxies.

DISPOSAL OF EARNINGS:

Dividends on Capital Stock.

Surplus distributed according to patronage.

Extension Bulletin No. 80 Manitoba Farmer's Library.

MARKET COMMENTS

It was stated in this column last month that the price for the top grade of bacon in the new contract was \$19.60 per cwt. That was an error. The figure should have been \$19.90.

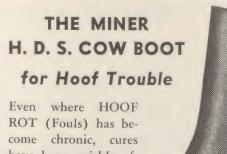
For some time past all cheese made in Ontario and Quebec has been set aside to fill quota requirements. During the past month that regulation was abandoned. The result was an advance in the price of cheese in the domestic market. That accounts for the wide range in price given at this time. The low price refers to the price that has been regular under the terms of the Contract and including the bonuses given. The higher price refers to the wholesale price in the domestic market since the ban was removed.

The regulation of prices is being gradually extended Some farm products are exceptions to the proposed "ceiling" on prices. Flexibility is also provided for in some cases to allow for seasonal fluctuations. Yet with all these exceptions there is a trend toward greater regularity in the prices recorded in this column. While these exceptions continue it is the intention to maintain this record.

In the meantime it is necessary to point out that if, and when, the present policy of setting maximum prices is extended to include all farm products; it may still be useful to keep record of the movement of prices of farm products from the outbreak of the war until the regulations were imposed. In this connection it may be useful to record that in September 1941 the index number of all goods was 92.5, that of all farm products 73.3, that of field products 57.6 and that of animal products 99.6. During the month of September 1941 the index of prices of animal products was 42 points above the index of prices of field products. While this relationship exists there is not much chance of the ceiling being applied to prices of all farm products.

Trend of Prices

LIVE STOCK: \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		<i>Nov.</i> 1940	Oct. 1941	<i>Nov.</i> 1941
Steers, good, per cwt	LIVE STOCK:	Š	*	Š
Cows, good, per cwt		,		76
Cows, common, per cwt	Cows, good, per cwt.			
Canners and cutters, per cwt. 3.00 3.85 3.60 Veal, good and choice, per cwt. 11.10 13.00 13.05 Veal, common, per cwt. 9.35 10.40 10.80 Lambs, good, per cwt. 9.63 11.00 11.10 Lambs, common, per cwt. 7.63 9.00 9.10 Bacon hogs, B.1, dressed, per cwt. 11.13 15.00 15.00 ANIMAL PRODUCTS: Butter, per lb. 0.30 0.33 0.34 Cheese, per lb. 0.14½ 0.18 0.18-0.25 Eggs, grade A, large, per dozen 0.45 0.44 0.46 Chickens, live, 5 lb. plus, per lb. 0.14 0.18 0.18 Chicken, dressed, milk fed, A, per lb. 0.23 0.26½ 0.25½ FRUITS AND VEGETABLES: Apples, McIntosh, Extra 2.10 — 2.60-2.75 Potatoes, Quebec No. 1, per 75 lb. bag. 0.65 0.85-0.95 0.90-0.95 FEED: Bran, per ton 26.00 29.00 29.00	Cows, common, per cwt			
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Butter, per lb	ANIMAL PRODUCTS:	11.1)	17.00	17.00
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Bran, per ton 26.00 29.00 29.00	FEED.	0.65	0.83-0.93	0.90-0.93
Dian, per ton		26.00	20.00	20.00
	Oil most			
Oil meal, per ton		35.00 (39	70)41.00 (3	970 149.00*



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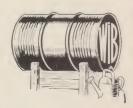
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The National Dairy Council Reorganizes

THE National Dairy Council is an organization composed of representatives of producers and distributors of dairy products. It was set up in 1920 largely through the efforts of Mr. J. A. Ruddick, then Dominion Dairy Commissioner, who was convinced of the desirability of having an association composed of all the different groups interested in the dairy industry, where matters of policy could be discussed and united action taken when necessary.

Recently, however, the producers' group has felt that the interests of the dairy farmers could be served better if an association could be formed composed of all the producers. It was pointed out that there are at present two organizations acting as mouthpieces of the dairy farmers—the producers' section of the National Dairy Council and the Canadian Dairy Farmers' Federation. It was felt that a completely new organization should be created, representing all the affiliated producer associations in Canada.

Accordingly, the producers have withdrawn from the National Dairy Council, which will continue as a strictly distributors' and manufacturers' body. It will, however, work in close collaboration with the new organization which will be known as the Milk Producers' Association of Canada. Final details of the new set-up will be worked out when the proposal is discussed at the annual meeting of the Canadian Dairy Farmers' Federation, which is to be held in Calgary early next year.

Gilbert McMillan of Huntingdon, for the past 5 years President of the N.D.C. gave, at what proved to be the last annual meeting, a review of the dairy situation in Canada. He urged that the governments do everything possible to assist producers who were short of feed this winter, if bad conditions next spring were to be avoided. He also warned that too stringent regulations on the prices of dairy products might have the effect of decreasing production to a point where scarcity would determine the price.

J. F. Singleton, Chairman of the Dairy Board, noted that it seemed hard to persuade people to make cheese, even though cheese is now worth more than butter. He estimated that some 13 million pounds of cheese will have to be sliced from our domestic requirements this year to provide the 114,750,000 pounds we ship to Britain and other Empire countries.

Dr. W. D. McFarlane, of Macdonald College, described what science might be able to do in opening up new markets for farm products. Great progress has already been made, said Dr. McFarlane, in using the products of the farm in industry; some 70 products can be made from corn, and probably as many more from soyabeans or milk. The farm

can be the source of industrial raw materials and the possibilities for the expansion of agriculture in this direction are probably greater than those awaiting any other industry. But the speaker warned that the cost of manufacturing industrial articles from farm products is still, in most cases, too high to justify their use on a commercial scale. Industry at present finds it cheaper to make its products from easily available materials — coal, oil, petroleum — than to get the same products by breaking down complex natural materials. So far there are few products of the farm which can compete with the products of the mines and oil wells as the cheapest source of raw materials. It is a question of economics and research: when the scientist can work out a cheap way of using farm products, industry will adopt them and not before.

Dr. J. F. Booth spoke on the post-war outlook for Canadian agriculture. Two courses appeared to be open. One would result in a lowering of trade barriers and a freer exchange of goods and services between nations; the other would lead to continued or even increased economic nationalism, with all the attendant restrictions and regulations. The former course, he felt, was the only one that would bring about the maximum of human welfare. Agriculture in Canada and in other countries of the New World has everything to gain from the expansion of overseas markets.

Professor J. E. Lattimer spoke on "A New Order for Canadian Dairymen." He pointed out that the value of farm land in Canada was \$38.00 per acre in 1914, \$48.00 in 1920, and only \$24.00 in 1940. During the period from 1926 to 1940, wages in farming decreased from an average per year of \$639. to \$456. or almost 29%. In farming, between 1914 and 1939, wages increased 31%. In industry between 1914 and 1939, wages doubled. Yet P.C. 7440 provides that wage rates of 1926 or at the outbreak of war, whichever is higher, must be the basis of industrial wages. Any new deal for the farmer in general and the dairy farmer in particular must start with a new deal in wages.

A new order is possible, stated Dr. Lattimer, provided the farmers themselves bring it about. Some of the methods which might be used by dairy farmers included decentralization of butter making, reduced costs of distributing fluid milk, raising dairy heifers in less expensive surroundings, artificial inseminations, improved pastures, increased volume of production per farm and cheaper feeds.

He concluded by noting that with 60 million acres in crop annually and 12 million people, Canadian farming depends on the export market in some lines. The new order that is necessary must include greater freedom of trade than prevails now, or has prevailed during the past 10 years.



DESIGNS FOR LEARNING

"Travel opens the mind; but so does print; and print is the cheapest mind opener there is, and the best."

- John Cotton Dana.

Seeking the Pumpkin of Knowledge

The object of the Farm Forum was aptly stated by Agronomist Georges Michaud in this phrase before the second annual conference of listening group leaders assembled at Macdonald College, November 10-14th. 40 farmers and agronomes representing twelve Quebec Counties spent five days in model discussion sessions in various College departments. Aided by recordings of actual Farm Forum broadcasts these leaders-in-training went through the process of group discussions led by members of the College staff.

From the opening meeting which heard the introductory broadcast of this year's series to the final session which met as the Quebec Farm Forum council under Chairman P. D. McArthur, enthusiasm was at a high pitch. A roll-call of members revealed the satisfying fact that listening groups will be organized in nearly every English speaking section of the Province this year.

Highlight of the conference was the morning session of the final day when members took control under the chairmanship of Mr. George Collum of Ormstown. Reports of small groups were presented by W. H. Day of Kazabazua, L. A. Beaudin, of Richmond, L. Horner of East Farnham, and Georges Michaud of Hull.

We print below part of Mr. Michaud's report as typical of those given:

Mr. Michaud's Report

Q.—What are the most vital problems of farmers today?

A.—1. Farm Labour. This is because young people from farms are going to the cities (a) to secure higher wages, (b) higher standard of living or (c) more recreational facilities. Finally, there is the question of military service.

- 2. Efficient Farm Management. The efficiency of many farms is impeded by a lack of knowledge of soils, crops, livestock management, suitable long range planning, etc.
- 3. Efficient Marketing. In many remote districts lack of proper marketing facilities forces many farmers to sell below the market price, for example to drovers and hucksters. They are also at a disadvantage in buying retail at local stores at high prices.
- 4. Capital. The two sources of capital to conduct farm operations, namely (a) profit on operations and (b) credit, are unattainable by many farmers. More than that, they are beyond their control.

Efficient farm management is a matter of knowledge

and training. Few of us like to be preached at, and farmers and farmers' sons least of all. But if real men do not like to be preached at they can develop the spirit of self help, and this is what the best of them have been doing for years. This is one feature of the Radio Forum. Through it we are led to realize that in addition to the apple of knowledge we have individually, there is a pumpkin of knowledge possessed by the group, and all that we have to do is to listen in a friendly way to our neighbors.

Involved in the problem of labour and management is the question of money. Financial considerations govern also our merchandising operations. The farmers' income is insufficient to make long range improvements and also for his successful annual operations. He, therefore, must rely on credit. Credit is either totally unattainable at the banks or only at a prohibitive rate of interest. Very little of even the best farm land in Canada can stand a rate of 8 per cent or even 6 per cent on borrowed money.

Money, therefore, is the question of greatest interest to the farmer in his struggle for life. He is little interested in words or facts that don't lead to action. He thinks in terms of action for he is a man of action . . .

(Social Credit and the co-operative movement in Nova Scotia were described as attempts to find a solution of the money problem.)

Exasperated to the point of overthrowing democracy,

Exasperated to the point of overthrowing democracy, these easterners changed their mind and made a decisive effort and a successful one to place democracy on its natural bases, justice, freedom and charity. Democracy for which your forefathers in Scotland, England, Ireland and mine in Quebec fought. We have been partly deprived of its benefits of late by modern ways of business seeking first and last profits instead of service.

Democracy such as it is, is still worth preserving fighting and working for, because it holds the possibilities of a kind of reform of which the Antigonish movement is a striking example.

RURAL HEALTH STUDY

As a result of the address on Rural Health given by Dr. T. J. Quintin at the Woodlands conference a number of residents of the Chateauguay-Ormstown-Huntingdon districts have undertaken a study and survey of health conditions in this area.

The committee is made up of Messrs. James M. Winter, chairman, Frank Dick and Rev. G. M. Rae of Chateauguay Basin, Rev. James Bunt of Hemmingford, John Fleming of Dundee, W. R. Wilson, Athelstan, P. D. McArthur of Howick — with Dr. Quintin as advisor.



THE WOMEN'S INSTITUTES SECTION

Devoted to the activities of the Quebec Institutes and to matters of interest to them

W.I. NOTES

Appeals for War Needs Urgent

The Q. W. I has received an appeal for slab chocolate for the use of the R. A. F. when the men return from flights. This is becoming more difficult to secure, as time goes on, and it is hoped that the response will be prompt and generous.

Seeds for Britain are again requested. These should be sent during the months of December, January and February, so that time may be given for their distribution before the gardening period, which is much earlier in Britain than in Canada. The following are asked for: Onion, Leeks, Carrot, Peas, Cauliflower, Haricot Beans, American Pea Bean, French Bean, Tomato, Land or American Cress, Sweet Corn, Large Sunflower, (this last for chicken feed.)

Three shipments totalling 15 tons, were sent from Canada and the Eastern States last year.

Clothing for use of British women should be on larger models than for American women. Overseas women are in many cases taller and generally larger than in Canada and the United States, and this fact should be taken into consideration in sending clothing of all kinds for women.

The Government Salvage Committee is asking urgently for conservation of bones and fats throughout Canada, which are very greatly needed in the making of glycerine, an important part of explosives. These should be more plentiful and easier to conserve during the approaching cold weather, and should be saved and collected regularly with the salvage. Keeping them in separate bags or other containers will facilitate the work of the sorters.

Education

Quebec Women's Institutes are much interested in all phases of educational work, and show it by practical means as occasion arises. The Branch at Cowansville is raising a fund for a scholarship, and has held various social events with this purpose in view. The high-light of Frontier meeting was a splendid address by Principal D. Staniforth of Brownsburg Consolidated School, his subject, "Cooperation in Education, — between School Boards, teachers and pupils." The speaker pointed out the opportunities of Women's Institutes in helping pupils as they leave school to find employment, and providing means of recreation. Minton Branch is carrying out this idea in the formation of a recreational club for young people.

Interesting selections from Kent Gordon's book, "The

King at Peace and at War" were read in Abbottsford Branch. Suggestions on hot school lunches were discussed at Richmond.

Brownsburg Branch furnished eleven prizes for the prize list of the Consolidated School there. Lachute had a talk on the organization of Adult Education classes and decided to secure a McGill Travelling Library. Lakefield entertained the local school staff, and Mille Isles had a discussion on "Why Educate?" and a discussion on the needs of school children.

The theme of Minton meeting was: "Democracy as Compared with Totalitarianism." Mrs. Daintrey led in the discussion which opened up wide vistas of thought. At Ayer's Cliff Mrs. J. E. Bayley read an article on: "The Status of Educational Privileges of Urban Children in Canada." Circulating libraries are used in Huntingdon County. Richmond had a paper on Adult Education, and Milby Branch decided to provide hot school lunches. Brompton voted money for School prizes for the current school year.

At Ormston the Institute held a reception for teachers and the members of the School Board, with Mrs. Pearce in charge. Miss Ramsay of Macdonald College addressed the meeting, urging co-operation between parents and teachers. Rev. W. H. Brown gave an address on Czecho-Slovakia. This Branch is co-operating with the Adult Education Committee during the present winter.

Hemmingford had a paper on: "The Radio's Contribution to Farm Life," and arranged for a Travelling Library. Huntingdon is also securing a library. Howick Branch entertained the school staff, and heard an address on temperance, by Dr. Gray.

Mr. A. Whitehead, Chairman of Bury School Board, was guest speaker at Scotstown. The Larger Administration as it applied to education was explained and its benefits, wherever tried, were shown. A reception was held for the local teaching staff. At Richmond a paper on Adult Education was given.

The Lachute Study Group in Lachute Branch was addressed by Major J. J. Mitchell on his recent trip to South America. A graphic description of the various countries, the habits and living conditions of their people and an exhibit of pictures and curios, held the attention of the audience throughout the address.

Counties Hold Semi-Annual Meetings

Mrs. J. Vanderlick, Dietitian, graduate of Macdonald College, was guest speaker at Papineau County meeting held at East Templeton. She stressed the important part

that nutrition is playing in the war, and urged the necessity for a balanced diet for growing children.

A recitation by Miss Betty Buchan, and a quiz contest in charge of Mrs. D. McIntosh, followed by an enjoyable supper, completed the programme.

Brome County arranged for a five-day weaving demonstration, with the assistance of the County Agronome, Mr. L. D. McClintock. Samples of linen made from flax grown in Brome County were on view.

Rawdon Branch in Montcalm County had as guest speaker Mrs. Alfred Watt, President of the A. C. W. W., who described the work of the Women's Institutes in the British Isles, and asked the members to make contacts with overseas members through correspondence.

Sherbrooke County held its semi-annual meeting early in November in Milby Hall, with Mrs. R. H. Ashe in the chair. A committee was appointed to study the subject of appreciation of music, consisting of Mrs. E. A. Orr, chairman, the principals of Ascot Consolidated and Lennoxville High School and the Branch Conveners of Education, the committee to report as soon as possible.

The subject of books for men in military camps was discussed and attention drawn to the fact that these must be suitable for men, and that they can be sent through the post-offices to the camps.

Eleven overseas correspondents were reported by members of Branches, and the scheme encouraged. The need of service or utility bags for women in the bombed areas overseas was mentioned, these to be made and filled with articles for use when other supplies are not available. It was decided to make a number of these, each Branch contributing its share.

Wreaths to be placed at war memorials on Armistice Day were ordered, the members to attend memorial services when possible. A report of the recent School Fair was heard, and committees chosen to outline next year's Fair.

The afternoon concluded with sound and silent pictures of the Solar System' and Geography and History of Canada. The pictures were shown by Principal Howard C. Aikman of Lennoxville High School, and were much appreciated. High tea was served in the dining-room of the Hall, with the members of Milby Branch as hostesses.

Citizenship

A programme of local historical interest was carried out in Abbotsford Branch, where the meeting took the form of a garden party. New Carlisle Branch has a salute to the flag at every meeting, as well as a patriotic song. Dundee Branch had a talk on Women's Franchise. Jerusalem-Bethany had a paper on Legislation. Bury Branch had a fine address on the Laws of Quebec as applied to home life, the rights of women, property rights, etc., by Rev. Mr. Rowe. The "Refugee" was the theme of a very instructive address given by Rev. R. W. Carr in Cleveland Branch.

Why we Should Vote, was the subject of the roll call in Wright and Aylmer East Branches. The latter Branch organized a collection of Salvage material, and arranged for one of aluminum waste. **Publicity**

Publicity was the theme of a meeting of Dundee Branch. The roll-call was: Something I saw advertised in the press. A quiz contest and a poetry contest followed, a paper on Ten years of Institute work in Dundee by Mrs. C. R. Grant and an address by Rev. H. Lindlay on the Club Women's Creed filled out an entire programme.

Child Welfare

Miss Bouchard, V.O.N. gave a demonstration in Ascot Branch meeting on the care of infants. This Branch replenished the first Aid kit in Ascot Consolidation School.

Compton County Institutes have had their request to have an English speaking nurse appointed on the staff of the County Health Unit granted.

A nurse from the County Health Unit addressed Wright Branch on building up resistance to disease. Several Branches in Gatineau County are serving hot school lunches.

Beebe Branch sent a collection of jams and jellies to the Old Folk's Home at Richmond and Sherbrooke. Suggestions for underweight children were given by Mrs. H. Cass, who gave a report of the medical examination of the local school by Dr. Gelinas.

Home Economics

Canadian Potteries was the subject of an address in Abbotsford Branch. In Stanstead North Mrs. Quillinan was winner of the first prize in a pie contest, receiving a War Saving Stamp. Orford Branch had an exhibit of handicrafts with articles supplied by the members. Hemmingford had an American demonstration on rug-making, also Dundee Branch. Richmond held a Thanksgiving supper, and disposed of a quilt to raise funds, amounting in all to \$35.00. Brompton Road catered for the Sherbrooke Rotary Rural supper. Brownsburg Branch had a paper on foods and their values by Mrs. Stephens, and Mrs. Smillie gave a talk on Work for Victory in the Kitchen. A demonstration on home economics by Mrs. McCullough of Brownsburg was a feature of the meeting at Upper-Lachute. Cherry River sponsored a bean supper successfully.

Wales Old Folk's Home at Richmond was remembered by Scotstown Branch with a collection of jams, pickles and jellies. A new Hospital bed was ordered.

Agriculture

Belvedere Branch had an address on the Origin of the Experimental Farm in Canada. Another activity was the holding of the annual Flower Show. Brompton Road catered for the local Ploughmen's Luncheon, and held a plant contest, prizes going to Mrs. W. Bonnallie and Mrs. H. McLeod. Ascot Branch catered for the annual banquet of Sherbrooke Ploughmen's Association, clearing a total of \$44.00.

Gratifying improvement in school gardens has been noted this year, and as an indirect result home gardens were better. The assistance rendered from the offices of the Agronomes was greatly appreciated. Howick School Fair showed several new features. Dundee branch had an address on bulbs and their care by Mr. William Fleming of Forsythe Farm.

Red Cross and War Work

Many of the Branches of Quebec Women's Institutes are responding to the request for service, or utility bags, for women in the bombed areas of England and Scotland. These bags are to contain articles in common use in making a morning toilet, and are given to women who have been hastily ejected from their homes by the bombing activities of the enemy.

Scotstown Branch adopted a novel method of securing supplies of this nature by asking each member to respond to her name in the roll-call with a gift of toilet necessities, as pins, bobby, safety or common; pins large or small, combs, soap, small scissors, thread, needles, tapes, face cloths and powders, and many other small articles of daily use are to be included in these 12 x 16 inch bags of cretonne or print, with a double draw-string at the top.

The request that the Women's Institutes take on the work of Custodians of the Queen's Canadian Fund has been complied with in several instances, among them Huntingdon and Scotstown.

Milby held a dance to raise funds in aid of the War Services, and planned to send Christmas boxes to overseas local boys. Ascot Branch donated 12 dozen chocolate bars to the Red Cross for Christmas boxes for overseas and gave War Savings Stamps as School prizes. Foster Branch raised \$25.00 for the Queen's Canadian Fund and sent 24 pairs of children's stockings and 5 pairs of wool blankets to overseas refugees, and forwarded 203 articles to the Red Cross Branch at Magog, and articles to the Knowlton Division. Cookshire planned supplies for service bags for overseas.

In Rawdon Branch Mrs. N. Clear and Mrs. James Ronan sponsored a garden party for funds for war work. The proceeds of this supplied many comforts for boys overseas, the summer colony adding greatly to the success of the event. Minton planned ways of raising money for the Queen's Canadian Fund.

Aubrey Branch made several quilts and an afghan for overseas needs. Parts of stockings and used underwear are thriftily pressed into service in the making of quilts by this Branch. Franklin is a unit in the Red Cross, and constantly turns out work for that organization. Hemmingford made quilts for the Red Cross, and reports 200 lbs. of maple sugar sent to the Navy League. Ormston held a social event to raise money for war work. Ormstown and Hemmingford donated 10 cents per member to the mobile kitchen fund, and Hemmingford also sent \$5.00 to the Queen's Canadian Fund. Quilts and cots were donated to the Red Cross from this Branch. Lakefield distributed wool for war work at the meeting, and Upper Lachute planned Christmas boxes for boys overseas.

Stanstead County raised a sum far in excess of ten cents per member for the Mobile Kitchen Fund of the F.W.I.C., this amounting to nearly \$200.00. Ayer's Cliff Annual Fair was an opportunity for the free use of the dining-hall on the Fair grounds, and this was utilized by

the County W. I. to serve meals during the Fair, which helped materially to achieve this amount.

The report of Red Cross and War Work in Sherbrooke County are given at the quarterly meeting included the following: Belvedere Branch, 20 articles sewn, and 49 knitted, 1 afghan donated. \$7.00 for soldiers' gifts, overseas. \$3.20 to the Mobile Kitchen Fund, \$5.00 to the Queen's Canadian Fund, \$20.00 to the F.W.I.C. War Service Fund. Milby Branch reported 174 articles sewn, 13 knitted, boy's pyjamas, and sweater. \$5.00 to the Queen's Fund, \$2.00 to the Record Cigarette Fund. Orford Branch knitted 50 articles, collected 50 lbs. tinfoil, gave \$2.00 to the Queen's Fund, \$2.00 to the Cigarette Fund, \$11.00 to the F.W.I.C. Fund, \$1.10 to the Mobile Kitchen Fund. Cherry River Branch reported 2 articles sewn, 17 knitted, 5.00 to the Red Cross. Lennoxville had 47 articles sewn, 63 articles knitted, 7 lbs. maple sugar, tea and sugar to overseas members. \$24.00 to the F.W.I.C. War Services Fund, \$4.25 to the Junior Red Cross, \$5.00 to the Queen's Canadian Fund.

Brompton Road had 94 sewn and 5 knitted articles, 1 complete layette of 20 pieces, 8 boxes sent overseas, 5 lbs. sugar to the Navy, \$5.00 to the Queen's Canadian Fund, \$4.00 in War Savings Stamps.

Ascot reported 48 sewn and 74 knitted articles, 3 quilts, \$5. War Services Campaign, \$1.70 for tea for overseas members, \$2.70 for Maple Sugar for the Navy, \$3.00 to the Queen's Canadian Fund, \$3.00 to the Sherbrooke Canteen Fund, \$56.00 to the F.W.I.C. War Service Fund, \$1.00 to the Cigarette Fund, \$3.60 to the Mobile Kitchen Fund.

Stanstead North planned a dinner which was on a large scale, half the proceeds going to the Queen's Canadian Fund. Several Branches in the County sent bundles to Britain.

Richmond Branch voted 10c per member to the Mobile Canteen Fund, and \$10.00 to the Queen's Canadian Fund. A total of 45 articles, including sweaters, scarves, socks, helmets, mitts, two-way mittens, sea-man's socks and scarves were knitted for the Red Cross during the summer months. Beebe planned Christmas parcels for overseas boys, and to collect money for slab chocolate for the R.A.F. A collection of jams, jellies etc. was planned, for the Wales Home at Richmond, and the Old Folk's Home in Sherbrooke.

The Red Cross shipment from Beebe Branch on October was as follows: 72 sheets, 31 prs. pyjamas, 32 pillows, 4 scarfs, 3 prs. socks, 1 pr. mitts, 1 pr. sea boot stockings, 25 caps, 2 sweaters, 2 pr. knickers, 4 prs. gloves, 5 helmets, 9 large quilts, 1 crib quilt.

Wright Branch planned to send Christmas boxes overseas for local boys, and to send gifts to Scottish pen-friends Sixteen pairs of pillows were sent for refugees. At Eardley's meeting four quilts were quilted for the Red Cross, and the members answered the roll-call with a pillow-case to be sent with Red Cross goods to overseas refugees. At Aylmer East one pair pyjamas, one bathrobe, and three pairs of socks were turned in for the Red Cross.

Travelling Library Notes

As the Christmas shopping season is now well advanced, we are all anxious to find original gift suggestions - something different - something acceptable not too costly - even something suitable for the whole family. A book is always a fine present, but how difficult to find just one book which will be enjoyed by every member of the family, and it is surely too expensive to give one to each person. Not at all. Have you ever thought of sending a Travelling Library home as your gift to the family? Here is a marvellous way of solving the collective problem. Forty books, to suit every taste, and costing only four dollars, little more than the price of one good volume. Think of the enjoyment provided in this manner and not merely a momentary pleasure, but one that will last for several months and help to pass the time during that long dull period when the festivities are over, and spring is a long way off. Write to the Travelling Library Department, Macdonald College for further information as soon as possible.

We have recently had a letter from a subscriber in Clarke City, P.Q., containing a request which we would like to pass on to the readers of this Journal. He is anxious to obtain an old edition of the Encyclopedia Britannica, or the Americana, for the use of boys and girls in that town. In exchange he could send a number of old books together with earlier works of living authors. Perhaps some public-spirited reader would be willing to give the encyclopedia without receiving any books in exchange, in which case the books could be sent to an army camp or to the Central Book and Magazine Depot in Montreal, for distribution to the men in the services. Any person interested in this suggestion may obtain further details by writing to Mr. J. A. Whitaker, Clarke City, P.Q.

Many of the rural schools have not as yet applied for the usual juvenile library, but we are hoping that when the excitement of Christmas is a thing of the past, they will again remember to call on this Department for supplementary reading for their pupils. We have on hand a large supply of new children's books which have not yet been circulated and we offer this as a special inducement.

We wish to explain to those of our subscribers who have found that the Library for which they had applied some time previously was rather unduly late in arriving, and to apologize. The Department had to be closed for some little time, as the Librarian was away owing to the illness and death of her mother, which occurred in November. As there was no one to take over the work during that time, a bottleneck was created. The Department is again running on full time, and we hope for your indulgence and good will. We are very sorry indeed for the inconvenience caused you, specially at this, our busiest season. We can assure you that all applications will be promptly attended to in the future.

PARENTS AND CHILDREN

by Mary Avison

This column will welcome comments or questions on the problems it deals with, or on others that arise in every normal home.

A FAMILY CHRISTMAS

Christmas is one of the seasons when we are especially conscious of belonging to a family. It is the time of year, above all others, when we draw together as an intimate group and when we are more aware of the wider circle of our family connections. Even those relatives whom we see or remember only once a year are not likely to be forgotten at Christmas time. This is true for children as well as for parents. When fathers and mothers are renewing tenuous contacts with distant aunts, uncles and cousins, the children also begin to feel their place in the family circle with its widespread yet strongly interdependent character. They realize, more fully each year, that they belong in some deep, if mysterious, way to a family fellowship.

This sense of belonging is vitally important to the wholesome development of every individual. We are social animals and we need to feel that we are part of a social group. The certainty of belonging to a group that accepts and supports us, that stands behind us and to which we belong not by virtue of what we do but by right of birth, is a strong insurance against emotional instability and insecurity, for both child and adult.

Since this is so, and since at Christmas time we are more likely to discover the reality of this fact and to experience the strength and assurance that comes from it, let us look a moment at our family Christmas to discover what it is that contributes to this experience. Perhaps as parents we may learn a secret or two that will be useful toward creating this experience for our children more frequently during all the seasons of the year. Perhaps we may discover how a permanent feeling of security may be developed and established for each and every one of us.

"Blood is thicker than water" is true to a certain extent even to-day. At Christmas time our merely physical relationships seem to draw us together; indeed this is the time when we are also most aware of the tie that binds us to all mankind as brothers.

But the sense of belonging comes more fully from doing things together, from sharing common experiences, plans and activities, than from a mere recognition of physical relationships. At Christmas we do many things not as individuals but as families. Differences of age, or sex, or varying interests, matters less. Everyone from Grandma to baby Jean, stirs the Christmas pudding; everyone has a part in the Christmas feast; everyone shares the excitement of Christmas secrets and surprises; everyone joins in the Christmas jokes and games.

But above all, at this season, members of the family know of the special family rituals that have been built up around Christmas. Tiny, apparently insignificant, they may appear to outsiders, or even to some members of the family at times, but these small items repeated year after year — the way the stockings are hung and the place, the special star at the top of the tree, the holy family crêche with the animals and the image half-hidden beneath, the customary order of giving the gifts, the songs that are always sung, the story that is always read on Christmas eve, and a thousand other things make up "Christmas at Home". They are essential parts of a ritual that we know, that makes us members of that one group, and that, being missed if we are elsewhere, give us a sense of strangeness, of being outsiders, of lacking something essential to our Christmas and our inner sense of security and serenity.

May yours be a real "Family Christmas" this year.

Macdonald College has Canadian Ayrshire Champion

New 3-year old record in milk and butter fat.

The new Canadian champion is Macdonald Dosie 2nd, an Ayrshire bred, owned and tested by Macdonald College. She has recently completed a three year old Record of Performance 365 day test, producing 20,148 pounds of milk and 806 pounds of butter fat which is an average test of exactly 4% butter fat. This is the highest production of milk and fat recorded for a Canadian Ayrshire at three years of age. The record exceeds that of her closest competitor by 2,707 pounds of milk and 4 pounds of butter fat.

This young cow made a very creditable 2 year old record in 305 days of 12,310 pounds of milk of 4.13% butter fat. Her 2 year old record was made on two milkings per day while her 3 year old record was made on three milkings per day. Macdonald Dosie 2nd comes by her producing ability honestly; her sire, Burnside Baronet, is a class AA and R.O.P. sire whose dam has in her life time produced 93,309 pounds of milk. On the dam side of her pedigree there are also some interesting blood connections. For instance, her dam produced a 2 year old record of 9,544 pounds of milk testing 4.49% in 305 days, she being sired by a son of Macdonald Dorothy whose life time record is 177,996 pounds of milk and 7,309 pounds of fat in ten lactation periods.

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MONT JOLI

Feed Grain Situation . . .

2. Slower and higher cost of gain in proportion to amount fed.

3. Transportation charges, whether on volume or weight basis, are being paid on inferior material. This also applies to such factors as elevators, brokerage, clearing, bagging, grinding and even dealers' profit.

4. When a certain proportion of different western feeds is required to make a balanced ration, it is hard even for experienced feeders to secure the balance required.

5. The eastern consumers who have had the unusual privilege of receiving through shipments of cars from the prairies, stopping at Winnipeg only for Federal Inspection, are willing to pay a premium on this "virgin" or "country run" grain, provided assurance is given of evading the terminal elevators' ultra-modern machinery.

Question 4. Is it in the "long-time" interest of the Western grower?

The general conclusion in regard to this question is as follows:

"Degrading" works against the interest of the Western growers, who sell by grade only, since they may become less concerned over cleaning their land, when they realize that their coarse grains are being "made to order", so to speak, for the Eastern trade, once they reach Fort William.

Question 5. Who profits from the practice?

The general conclusion of the group was that this practice must have been initiated to create what are known as "elevator earnings".

Question 6. It has been said that even an Eastern farmer who owns a ranch in the West cannot ship a carload of grain to himself in the East, or at least that he encounters insuperable difficulties in his attempts to do so. Is this correct? If so, why?

With reference to through shipments from the interior prairie points direct to an eastern farmer or consumer, the members of the group could find nothing in the present legislation to prevent the western farmer from shipping his own crop. Wheat, which is now subject to crop quota deliveries which are under the Federal Wheat Board's jurisdiction, is an exception. However, the fact was brought out that the interior elevators' system of buying, handling and shipping is so well organized and "efficient", that it has become difficult if not impossible for the individual farmer to ship his own grain, especially when an "acute car shortage" is the customary, if not the conventional, answer.

Question 7. Is it true economy on the part of the eastern buyer to purchase low grade feeds? If not, why?

It was generally agreed that it should be better understood by eastern feeders that purchases of low grade feeds or "fillers" are definitely against sound and economical feeding practice for reasons already given in Question 3.



SGROOL PROBLEMS AND VIEWPOINTS



THE FISHER TRUST FUND

by Sinclair Laird

The County of Brome was so dear to the Honourable Sydney A. Fisher, formerly Minister of Agriculture at Ottawa, that he established the Fisher Trust Fund, at his death in 1921, for the purpose of improving Agriculture and Education in the County. Originally, the fund produced an annual revenue of about \$5,000, but, in the last twenty years, the interest rate has declined and now the annual revenue at the disposal of the Trustees is little more than \$4,000.

Twenty years of operation reveal that much has been accomplished with the comparatively small grants that have been made from this fund to Protestant schools and to agricultural activities. Originally, it was difficult to induce school boards to keep their schools open for eight months or longer. Encouragement and financial assistance have been successful in making a ten-months' scholastic year the rule. Much attention has been paid to the cleanliness of schoolhouses, the abolition of primitive sanitary arrangements, and the building of new schools, which are better lighted and heated.

In Agriculture, the Fisher Trustees have offered two agricultural scholarships of \$75 each, tenable for two years in the Diploma Course at Macdonald College, to pupils from the superior schools who have passed at least Grade IX.

They have also given an annual grant of \$500 to the County Agricultural Society and \$50 to the Horticultural Society. In addition, they make a grant to the Agronomist, help to organize Calf and Pig Clubs for boys and girls, and encourage the raising of hogs of bacon type.

In Education, the Trustees offer: (1) scholarships tenable for one year to pupils from elementary districts to attend one of the superior schools of the County. Although the value of these scholarships may vary, the number remains constant with the distribution spread fairly over the County. The extent of this generous aid to parents and pupils is easily understood when it is pointed out that, in 1940-41, these scholars were 34 in number — namely, 9 at Cowansville, 18 at Knowlton, 4 at Sutton, 3 at Mansonville. Apparently, a small scholarship made it easier for these children to have higher education.

(2) Prizes were also offered for essays by teachers on the subject "As a British Citizen, and a Teacher, What Am I Doing to Instil in my Pupils British Ideals of Democracy and Citizenship?" Miss Mary Jean Woodard of Potton won the \$25 first prize, and Miss Laura Patch Wright of Brome won the \$15 second prize. Five dollar prizes were awarded to four other teachers who wrote the

best essays in the other municipalities. Similar prizes were offered to superior schools, and three prizes were awarded to the three contestants.

Through lack of interest, the Trustees propose to discontinue these prizes which have been a feature of their activities for eighteen years.

- (3) The Trustees also co-operate with the School Inspector in the Annual County Conferences of Teachers in Knowlton during the month of September.
- (4) In the past, they have offered also bursaries to outstanding teachers to attend the summer school at Macdonald College for further training, but these are to be discontinued in future.
- (5) The Trustees have also encouraged the Enterprise or Activity methods in County schools by offering prizes of \$5 to the teacher and \$5 in books or equipment to the best school in the six districts as decided by the School Inspector. The excellent work of Miss Pauline George at Owl's Head School, Miss Alice Mizener at Creek School, and Miss Lorna Lewis at Pettes School, induced the Trustees to double the awards for teachers and schools so that these outstanding rural teachers obtained \$10 and their schools \$10 values in books or equipment.
- (6) To encourage school boards to bring their school buildings and grounds to a more modern standard, grants have been made to instal Hydro-septic toilets in certain schools on the basis of one-third of the cost up to a total of \$200. Two school boards took advantage of this offer.
- (7) The Trustees have also provided for an additional inspection of elementary schools in November each year.

One of the most interesting developments has been the formation of the Associated Protestant School Boards of Brome County. This association is the result of numerous meetings held under the auspices of the Fisher Trustees in the past, and its purpose is, frankly, to cooperate with the Fisher Trustees in attaining the educational objectives of the Fund.

It is extraordinary that so much has been accomplished with so little financial support. The remarkable success in Brome County is due to the far-sighted and shrewd policies of the early Trustees and their continuation by the present Trustees who are now securing active support from the County School Board Association.

The Fisher Trust Fund is a unique method of assisting both education and agriculture at the same time. Its achievements have been worthy of its founder and of its Trustees.



THE COLLEGE PAGE

News of the College - Staff, Students, Graduates

BLACKOUT

Macdonald College blacked out last month, along with a large part of the province, and the experiment was, as far as this part of the country is concerned, a complete success. Ten o'clock at night usually sees every window in each residence a blaze of light, mute evidence that knowledge is being systematically (we hope) absorbed. Lights in classrooms and laboratories show where senior students and staff members are engrossed with complicated bits of apparatus, or working in the evening quiet preparing a seminar or a scientific paper.

But this night was different. The blackout was complete. Candour compels us to record, however, that this is only what might have been expected, for a strong hand in the power house pulled the main switch as the sirens started their wailing and plunged the whole campus into darkness.

To patrol the college property, prevent "incidents" and report any trouble, the services of the army were enlisted. All students enrolled in the college military training programme paraded in front of the armoury at 9.00 p.m., drew rifles and marched by platoons to the areas for which each was responsible. Company headquarters were set up at the power house gate; one platoon was responsible for the Main Building and surroundings; another for property east of the power house; a third assumed responsibility for the territory from the Agronomy Building to the Stock Farm. Double sentries were posted at all strategic spots, and all roads, etc. were patrolled during the period of the blackout.

It must be admitted that there was evident a note of disappointment in the voices of the men as they reported to headquarters after their tour of duty "No incidents, sir." Instructions to remain indoors during the blackout had been followed strictly, and the sentries on duty found no one abroad to challenge. However, it made a change from the routine of drilling and it was one parade which everyone seemed to enjoy.

Blair Baker, B.Sc. (Agr.) '38, is now on the staff of the Chemistry Division of the Imperial Oil Company at Dartmouth, N.S.

DISTINGUISHED VISITOR

Sir John Boyd Orr was a guest of the college last month. Sir John is Director of the Rowett Research Institute (the Imperial Bureau of Animal Nutrition) at Bucksburn, Scotland, affiliated with the University of Aberdeen. He is internationally known as an expert in animal nutrition, and his study on human nutrition among the natives of Africa is



a classic known to all students of this subject. He is now employed on research for the British Ministry of Food, and came to this continent on official business.

His stay at the college was necessarily short and most of his time was spent in the juice laboratory of the Horticulture department, a phase of work in which he was much interested. He sampled some of the various juices which had been prepared during the summer, and was much interested in seeing turnip juice being prepared. Some time was spent discussing the problem of bacon production, and a visit to the Institute of Parasitology closed the day.

Sir John came to this continent by boat and returned to England by bomber.

We received a chatty letter the other day from Angus Rose, who was with us in 1938 and 1939, after graduating from the N.S.A.C. at Truro. Angus is at present supervisor and programme director of the Truro Y.M.C.A. Red Triangle Hut, a job which he finds very interesting but which "keeps him on the jump", to quote from his letter. Although he admits he has been on the move considerably since he left Mac he has had time to get married, and announces with pride that he is the father of "a swell daughter, Mary Faith, born August 28th, 1941."

We like to get letters like this one. It shows that our graduates haven't forgotten the College, and their letters give us a chance to keep their classmates informed of the doings of their friends. Won't you let us hear from you too? Even if you are too modest to tell us of your own achievements, we'd like to hear about your friends who might not have thought of writing to us themselves. Since we aren't planning any re-unions for some time, why not use the Journal to keep in touch with your friends?

THE QUESTION BOX

Have you any problems that are bothering you? This column is at your disposal. Address your questions to the Editor, Macdonald College, P.Q.

Question: For some years I have used barnyard manure on my lawn and on my small garden but the weeds have been very bad. Some people advise me



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to use dry blood meal, others say fish meal. Please tell me what to use and where to buy it.

E. J. G., Georgetown.

Answer: The soil in Georgetown and vicinity is reported to be generally light and gravelly and this would indicate the desirability of supplying as much organic matter as possible. If you have been using barnyard manure and have had trouble with weeds, presumably from that source, it is likely that the manure has been fresh and not rotted. Well rotted manure does not contain any appreciable quantity of weed

We would suggest that this well rotted manure be made the basis of your treatment for both the lawn and garden. For the garden this should be reinforced with complete commercial fertilizer such as a 4-8-10 at the rate of approximately one pound to 10 square yards. To further increase the organic matter in your garden, you might plant fall rye in the early part of September and dig in the crop in early spring. For your lawn if you can make up a compost of manure, sod and the discarded vegetation from your garden and use this as a top-dressing along with the fertilizer as above, it should give you good results. Presumably you have water available for the lawn - no amount of fertility will give you a good sward without adequate moisture. Blood meal and fish meal may be all right, but are unusually expensive sources of plant nutrients.

Question: At what time of year should cedar hedges be trimmed?

C. P. M., Ormstown.

Answer: Cedar hedges should be trimmed in June. Earlier trimming might result in freezing of the new growth induced by the pruning. If necessary, they may be trimmed again in August without injury.

> Buy War Savings Stamps Regularly!



My brother from the city

brought his kid out to my place last week. The nipper had never seen a farm, and we had a lot of fun showing him around. He asked more questions than you could shake a stick at. In the hen house I showed him the incubator and told him how it hatched eggs. I said that if he'd come again in the spring I'd show him the chicks hatching. Then he asked: "Does that thing only hatch in the spring?" That one just floored me. Why should I hatch only in the spring ::. why not four or five times a year? I have all the equipment lying idle. By hatching several smaller flocks at different times I could raise more birds with the same outfit . . . and get a steadier supply of eggs. So, right now I'm feeding my hens and roosters "Miracle" Hatching Mash for a setting of eggs. Last year I got more than eighty chicks per hundred eggs when I fed

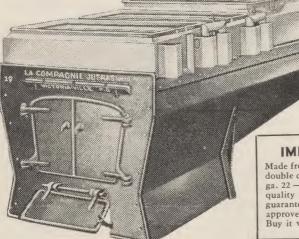
my hens "Miracle" Hatching Mash.

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STRIPPINGS

by Gordon W. Geddes

More farmers hired tractors to do at least some of their plowing this fall. The idea of hiring them for harrowing has been steadily growing in favour and now labour conditions are causing plowing to be included. Certainly we can't all try to get along without plowing and the custom outfit is cheaper than one's own on a small acreage.

Possibly some of us could reduce the actual labour requirements still further

without seriously affecting our production. We have been inclined in the past to keep rather too many cattle and have them going short on roughage and fed on purchased grain to make up the deficiency. The most economical way to produce milk (or beef) is to supply plenty of good roughage. Experiments conducted at Beltsville in Maryland gave production records that would startle us on just roughage. Our cattle need a certain amount of feed for maintenance and it is only the surplus above that

which they can turn into milk. If we have too many that surplus is too small a part of our total roughage yet that small part represents our profit.

Reducing our stock to the point where they would have plenty of good roughage would increase the profit section. Likewise it would reduce the work, particularly if we planned to have the cows get their own roughage in the form of pasture for as many months as possible of the year. On top of the extra roughage we could still feed as much grain as we desired to further increase production. Even grain won't get milk without roughage.

Perhaps you will say that if we reduce our stock, we cannot maintain soil fertility. However, if we plug the leaks in that respect I think it can be done. We do not take enough care of our manure. The estimate is that we waste an average of a hundred dollars worth per year per farm. We should make more effort to save the liquid and prevent the escape of the nitrogen. Using superphosphate in the stable can help to do both these things. Besides manure is not a balanced fertilizer. It needs phosphorus and potash with it. The superphosphate supplies the first and potash can be added. Many of us waste too much plantfood growing weeds. More attention to prevention of waste and heavier purchases of fertilizer should keep the farm producing. The fertilizer will also lengthen the pasture season during which the cattle can feed themselves.

In regard to milk production, Canadian farmers were supposed to have a big job on their hands last summer to supply that need. However, they did it in spite of everything but the government failed in the job of getting the milk into the right form. Now we have not enough cheese and too much butter. At that perhaps the butter will all be eaten before spring but Britain needs cheese and we could get along with a little less butter. Besides, any possibility of a butter surplus enables the trade to do discouraging things to the price of butter. Next season something should be done to regulate the manufacture of



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butter and cheese but that something should not be a low price for butter to encourage cheesemaking unless cost of production goes down with it. At least the government paying freight is having a temporary effect for feed prices are said to have gone down.

If you have any ideas as to how proper use of our milk can be brought about with fair returns to farmers, join a Farm Forum so they can be put where they

can be useful. If you haven't, join just the same and you may get some or help to form some in the discussions. After we get the solutions worked out in the Forums, then we'll all want to get into the Federation of Agriculture so it will be strong enough to get our remedy into effect.

One concrete result of last year's Forum has been the formation of a Cooperative in Brome County. That's a step in the right direction but we must go further. Just a cooperative is not enough, we must see that it saves us money or renders us some extra service to justify its existence.

Information and Where to Get It

Chimney Troubles — Treatment and Prevention. Stencil No. 26, by Prof. L. G. Heimpel, Agricultural Engineering Department, Macdonald College — 20c.

The construction of chimneys, the construction details of fire places, the size of flues, creosote formation and factors controlling good draft are all discussed in this article. This is an excellent publication for the householder who has found trouble with a chimney or who wishes to build a fire place.

Painting on the Farm. Bulletin No. 405, by E. W. Kendall, Ontario Agricultural College, Guelph, Ontario.

The characteristics of good paint are described as well as when to paint, the composition of paint, paint brushes, the action of driers, the preparation of paint, and home-mixed paint. Figures as to the areas that paint will cover are given. Some common paint troubles, varnishing and the preparation and application of white-wash are explained by the author.

Making Farm Belt Power Plants from Old Auto Engines. Stencil No. 20, by Prof. L. G. Heimpel, — 20c.

Directions for the converting of an automobile into a belt power engine for the farm are given in this issue. Horse power ratings of engines, the construction of a belt pulley unit, and a home made engine governor are described or illustrated in this seven-page, well-written publication.



I've been keeping tabs

on a calf I'm raising on Ogilvie "Miracle" Calf Meal. When it was about a month old it weighed a hundred and seventy pounds. A month later it was two hundred and forty-five. At three months it weighed three hundred and forty pounds. And it kept right on growing like a weed. At the end of eight months it hit over the seven hundred pound mark. At six months everybody swore that it was near a year old. That is, everybody who hasn't used "Miracle" Calf Meal to raise calves. Those folks just say, "Sure!" and they don't get a bit excited, because they've done the same thing. But I sure wish you could see that calf-you'd want to try that Ogilvie "Miracle" Calf Meal right off. For one thing it contains iodine, which



THE "MIRACLE" WAY

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DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec Department of Agriculture

Kiwanis Club Organizes a Get-together of the Young Farmers of the Ste. Martine District

Mr. Edgar F. Tolhurst, President of the Kiwanis Club of Montreal and Mr. N. April, Director of the Ste. Martine Agricultural School, presided at a rally of young farmers of the St. Martine district on October 18. The field day was held at the Ste. Martine School at the same time as the Annual Exhibition of the Ste. Martine young farmers. About 150 club members from the country around Ste. Martine were present, including many of the most progressive young people of the district.

A very interesting programme had been prepared for the day. The first item was a demonstration and talk on horses and dairy cattle by Prof. Adrien Cote, M.Sc. This was followed by a general discussion by the group after which the boys were asked to judge a class of dairy cows and one of horses.

Lunch at the Agricultural School was the next item on the programme, after which the group went to a specially prepared section of the grounds to see an exhibition of bacon hogs. These were hogs which had been raised by club members of the district under the plan organized by the Kiwanis Club of Montreal in collaboration with the Department of Agriculture, which was described in the November *Journal*. The hogs were judged by Mr. Alphonse Deschenes, hog grader on the Montreal Market, who awarded prizes as follows:

Section I.—Breeding sows furnished by the Kiwanis Club of Montreal in co-operation with the Wilsil Company.
—1st. prize: Rene Vallee; 2. Medard Primeau; 3. Albert Daoust; 4. R. Dulude; 5. Marc Jodoin; 6. Gerard Jodoin; 7. Real Jodoin; 8. Jacques Tessier; 9. Leopold Lacoste; 10. Fernand Hebert; 11. Rolland Touchette; 12. J. M. Touchette; 13. Rolland Parent; 14. J. M. Huot; 15. Laurent Legault; 16. Joseph Parent; 17. Andre Bolduc.

Section II.—Group of three hogs born between June 1st and July 25th -- 1. Fernand Hebert; 2. Laurent Legault; 3. Jacques Tessier; 4. Rolland Touchette; 5. Andre Prud'homme.

Section III.—Group of three hogs born between July 25th and October 1st — 1. Real Jodoin; 2. Leopold Lacoste; 3. Gerard Jodoin; 4. Albert Daoust; 5. Medard Primeau; 6. R. Dulude; 7. J. Marie Touchette; 8. Marc Jodoin.

A demonstration of hog grading by Mr. Deschenes

was watched with interest, and after the demonstration the club members were invited to judge a class of 5 breeding

To close the event, a general meeting was held in the school hall, where a number of interesting speeches were heard. Among those present were Edgar Tolhurst, President of the Kiwanis Club; Albert Martin; Eldon Wegg; L. Dunbar; Bert Fyon; Wm. Pyper; W. G. Bryant; A. C. Cordner; Dan Brogan; E. T. Jeffrey; G. S. Cowie, chairman of the Agricultural Committee of the Kiwanis Club. Other invited guests included Abbe Dulude; Abbe Boileau; agronomists S. Gosselin, P. Menard, Eugene Vermette, G. Ampleman, Paul Morin, Roger DeBlois; professors Fernand Dufour, Adriene Cote, Lucien Crevier; Alphonse Deschenes and Francois Boulais, propagandist for the group.

Mr. April welcomed the guests and expressed his pleasure at presiding over such a happy gathering. He laid great emphasis on the importance of education. "Remember," he said, "that you must be prepared to face the difficult situations of modern times, and this preparation can be obtained only at the Agricultural School."

Mr. Fyon, of the Kiwanis Club, pointed out how necessary it is, for the benefit of the country as a whole, to have co-operation and understanding between the people who live in cities and those who live in rural districts.

Results of the judging competitions held during the day were read by F. Boulais.

Rosaire Denault of St. Remi de Napierville won a bridle given by the Kiwanis Club for placing first in horse judging. Romain Robidoux, St. Constant, came first in judging dairy cattle and won a halter given by Wilsil's Limited. Three Plymouth Rock hens offered by the Agricultural School were won by Gerard Fyle, St. Constant, who came first in judging breeding sows.

Jerome Marcotte, of St. Remi, scored more total points than any other contestant and was named champion. He won a four months old breeding sow, given by the School.

The programme of T.B. testing which was greatly reduced in scope after the outbreak of war, is being revived, with particular emphasis being placed on Portneuf district. In this part of the country several farmers are faced with the prospect of losing their whole herds.

It Took an Act of Parliament to Declare War on Dodder

In the late summer of 1940 the Minister of National Defence ruled that dodder was endangering flax production in Quebec. Flax is of vital importance to the war effort, and legislation was immediately passed in the Federal House to enable the Provincial authorities to deal drastically with this weed before it got out of control.

This decision by the Defence Department was made after an inspection of flax fields in Quebec showed dodder to be dangerously prevalent. For example, in Vaudreuil-Soulanges, Provincial inspectors found dodder to be present on 1001 acres of flax, about half of which could be classed medium to severely infested. This threat to the flax industry was a real one, but fortunately the danger was perceived in time for action to be taken the same year.

Dodder is a plant which exists by sucking the sap of other plants. Except for a very short time in its life history, just during germination of the seed, it has no root system. The food reserve stored in the seed is used up in making a tiny root and a thin stem. The stem wraps itself around a plant growing nearby and fastens itself with small suckers. From then on all its food is taken from its victim and the dodder plant loses all connection with the soil.

There are about 158 species of dodder known, all very much alike in appearance, the only difference being in the kind of blossom. It is found all over the world; in certain parts of France and Germany it has forced farmers to give up growing clover entirely. Six species have been found in Canada. In Quebec, four species have been identified, two of them within the past year. An interesting thing about the plant is that in many cases it can live on only one host plant; that is to say, a species which will live only on flax will die if it germinates in any locality where it cannot find flax plants to twine around.

The plant is recognized by its bright yellow or orange color. It looks like orange string wrapped around its unfortunate host. The blossoms are small, and the seeds that develop from them fall to the ground or are harvested with the crop. They germinate the following spring.



Dodder on flax. Note the string-like stems and small flower clusters.

The authority granted to Provincial inspectors by the Federal Government was far reaching. Any inspector could visit any field and if he found it infested with dodder he was empowered to seize the crop, and destroy it if necessary, to prevent dodder seed being ripened. To back up the inspectors it was provided that anyone refusing to co-operate — anyone selling or in any way disposing of a condemned crop - – might be fined from \$50 to \$500., or jailed for three months, or both.

Although the inspectors got away to a rather late start in 1940, many fields were condemned that year. In 1941, inspection continued and 40,000 acres of flax were examined by 22 Federal and 12 Provincial inspectors. In 1941, in the same area where in 1940 1001 acres were found to contain dodder, only 470 acres contained dodder and of these 350 acres showed only traces of it here and there. In the lightly infested fields the affected plants were pulled and burned; heavily infested fields were cut before the dodder seed matured. All seed from infested fields were processed into oil.

The first offensive against dodder has been successful. Continued vigilance will get rid of the weed but there must be no relaxation of our efforts next year.

AGRONOMISTS MEET IN QUEBEC

The annual meeting of regional agronomists was held in Quebec on December 2, 3 and 4th. This is the time and place where the results of the previous year's work are examined and discussed, and plans are made for the coming season. The Convention of the Presidents of the Cercles Fermières was held at the same time with a joint meeting on the closing day of the conferences. As we had gone to press before the meetings were finished, we are obliged to defer a detailed report of these meetings until next month.

Armand Gelinas, Chambly county agronomist, died of typhoid in Montreal on Nevember 21st. at the age of 44 years. Mr. Gelinas was well known in several counties of the province where he had worked as provincial agronomist and as publicity man for the Co-opérative Fédérée. He had been stationed at Longueuil, as county agronomist for Chambly, for the past three years.

SAVE FOR VICTORY

Until recently farmers have had no way of making regular and systematic contributions towards War Savings. In the cities professional and business men contribute through their banks; salaried men, office workers, store clerks, labourers, can have definite amounts deducted from their salaries by their employers and applied toward the purchase of War Savings Certificates. Now a similar plan has been worked out in collaboration with the butter and cheese factories in this province in which all farmers who sell milk can take part.

The plan is simple. A farmer who wants to make regular contributions gets a card from the secretary of the factory to which he sends his milk. On this card he marks the amount which he authorizes the factory to hold back from each milk cheque. The amount may be whatever he feels he can spare — 50 cents, one dollar, two dollars from each cheque. The factory holds this amount back from his monthly cheque and gives him credit for it on its books. At the end of each month the money is sent to Ottawa, provided there is enough to buy one War Savings certificate which costs \$4.00. If the monthly deduction amounts to \$5.00, the factory will send \$4.00 to Ottawa and keep the difference on deposit until the balance is some multiple of \$4.00. When the money reaches Ottawa a certificate is made out in the farmer's name and mailed direct to him.

War Savings Certificates are the safest investment you can make. They are direct obligations on the Dominion of Canada. If held until maturity each \$4.00 certificates increases in value by 25% — a return of 3% on your money. You lend \$4.00 today and in 7½ years get back \$5.00. You are not giving your money — you are lending it. The money you lend now will help win the war, and these regular savings will build up a nice nest-egg for the future.

SEED POTATOES AVAILABLE

A supply of certified potato seed, from elite stock, is available now to Quebec farmers at a relatively low price. It is a good chance to lay in seed potatoes for next spring which are sure to be of first quality and absolutely free from disease.

These potatoes were produced last summer, under very strict supervision, in Nicolet, Maskinongé, St. Pascal, St. Arsene, St. Eloi, and Shipsaw. Everything which came in contact with the potatoes after harvest was first disinfected under official supervision, so there is little danger that these potatoes carry any disease.

Farmers should seize this opportunity to get seed potatoes, home-grown under ideal conditions. This is the opportunity to change seed and be sure of a disease-free crop next year. Write to the Horticulture Division, Quebec for further information.

JUNIOR CHAMPION



ROBERT ROY.

Winner this year of the Junior Agricultural Merit Competition among the young farmers of Quebec is Robert Roy, son of Odila Roy of Stanstead. Robert, who is one of a family of twelve, operates the home farm and six of his brothers are farming on their own lands nearby.

The title of champion young farmer carries with it a silver cup, a two-year scholarship at the Ste. Martine Agricultural School, a gold medal, and two cash prizes, one of \$50.00 and one of \$10.00.

The presentations were made at a celebration in the Stanstead parish hall on the 27th of November, attended by the parish priest, the mayor of Stanstead, Senator Howard, members of the agricultural societies and many others. Hon. Thisdel represented Premier Godbout: also present from the Department of Agriculture were Mr. J. A. Proulx, chief of the Agronomic Service, Mr. E. Marseille, Mr. W. G. Macdougall, and a number of other department officials and agronomists.

Another similar gathering was held on the same evening at St. Guillaume, when the local Agricultural Society paid tribute to two young club members, Messrs. H. P. Dugas and J. P. Belisle, the judging team which placed first in the hog judging contest at Toronto last month.

The *Journal* extends its congratulations to all these accomplished young farmers and wishes for them continued success in their chosen life's work.

In its campaign to develop the sheep industry in Quebec the Sheep and Swine Division has given assistance in placing more than 4000 breeding ewes and 300 rams in the hands of farmers throughout Quebec this year. Every breeding ewe brought to market in the province was bought for this purpose, and even so the demand was greater than the supply.

DEPARTMENT WILL HELP IN BUYING HAY

Quebec farmers who have been hit by this year's dry weather and who must buy hay for their livestock for the winter are to get some help from the Department of Agriculture. They will be able to make use of the purchasing service of the Quebec Co-opérative Fédérée, and the Government will pay the shipping charges on all shipments of 12 tons or over, under certain conditions.

Any bona fide farmer who has not sold hay from his farm since July 1, 1941, and who needs to buy hay, may apply for assistance, provided he lives more than 15 miles from a source of supply of hay, and that the hay he buys is to be used only as feed for his own livestock.

The offer of assistance applies only to farmers living in the following counties: Argenteuil, Berthier, Champlain, Charlevoix, Two Mountains, Gatineau, Joliette, Labelle, l'Assomption, Laviolette, Maskinonge, Montcalm, Montmorency, Pontiac, Portneuf, Papineau, St. Maurice.

The request for assistance is to be made to the local agronomist, and must be accompanied by a deposit, by certified cheque or money order, made to the order of the Coopérative Fédérée, for the cost of the hay wanted. The agronomist will send the order to the Co-opérative Fédérée which will buy the hay and ship it to some convenient point where the farmer can pick it up. There will be no shipping costs for the farmer to pay.

The Co-opérative will do its best to send the quality the farmer orders but if hay is scarce and the desired quality cannot be obtained, every effort will be made to send a shipment which will be as nearly as possible the quality that was ordered.

If the deposit which accompanied the order proves more than the cost of the hay, the difference will be refunded. On the other hand, should the cost of the hay prove larger than the amount received from the farmer, he will be billed for the difference.

This offer is good up to March 31, 1942.

CORRECTIONS

In the report on sheep judging at the Quebec Fair which was furnished to the press by the Exhibition authorities, H. G. Snaden was given credit for having won all Cheviot classes and championships. We have discovered that this report was inaccurate, and we publish herewith the correct placings.

Slack Bros., Waterloo, had the champion ewe, and placed first in the following classes: yearling ram, yearling ewe. The champion ram and firsts in the other classes were H. G. Snaden's entries.

A "de luxe" cheese, *Richelieu* brand, is being made at the St. Hyacinthe Dairy School under the supervision of Mr. I. A. Langlois.

QUEBEC DAIRYMEN TO HAVE A NEW MAGAZINE

Another new publication has been undertaken by the Department of Agriculture. This one is being issued for the benefit, primarily, of operators of dairy heads, but will be useful for anyone connected with the dairying industry. It is the official organ of the Quebec Dairyman's Association and is edited by Roland Camirand of the Dairy Division. The name of the magazine is "Quebec Laitier."

Of 24 page size, it will appear four times a year and will contain articles and notes on all phases of production, processing, distribution and consumption of dairy products. These articles will be written by expert technicians and should prove to be of great value to those who get the magazine. The first number will be entirely in French, and while it is not at present possible to print an English and a French edition, future numbers will contain some subject matter in the English language.

Such a publication, containing authoritative information on how to manage the dairy herd for maximum results should prove of especial value in times like these, when the need for greater production of dairy products for our comrades overseas is being stressed on all sides. The magazine will be sold to all members of the Quebec Dairymen's Association at the nominal price of fifty cents a year.

The revised curriculum for the French Agricultural Schools mentioned in the November *Journal* is about to be published by Mr. J. C. Magnan under the title "Programme Generale a l'Usage des Ecoles Moyennes et Regionaux d'Agriculture."



Good cheese will bring good prices this winter, and good cheese should be the aim. To get the quality that will bring premiums, cheese must be ripened in a warm place during the winter months. For best results, the temperature of the ripening room should be 70°F.

SAVE YOUR MILK CANS

Don't throw away that old milk can! Perhaps it can be repaired. Canada needs all the steel she can get for war industry -- the less we use for civilian purposes the more there will be to make into tanks and corvettes. Don't buy a new can if the old one can possibly be patched up. Bring it to your creamery or cheese factory where arrangements will be made to have it repaired or re-tinned. If it is absolutely beyond repair at least see that it goes into the ever growing pile of scrap metal. And while we are on the subject, isn't there a lot of scrap metal lying around the farm that could be given to Canada? An old hay rake wheel for example, doesn't seem so very important as a cog in the war effort, but there must be hundreds of them lying around in this province - and a hundred hay-rake wheels make quite an imposing pile. Why not have a clean-up and give or sell your scrap metal to the Salvage Committee?

DEPARTMENT SCHOLARSHIPS HELP YOUNG STUDENTS

Scholarships awarded by the Department of Agriculture this fall have enabled 53 young farmers, including one girl, to attend courses at an agricultural school this winter.

The number of scholarships available in each agronomic district is determined by the number of young farmers' clubs in each district. For instance, a district having 2 or 3 clubs will be eligible for one bursary; a district with from 4 to 6 clubs gets 2 bursaries etc.

Candidates are selected by merit on the basis of the number of study courses attended, and participation in a project including the keeping of accounts. A written report of the candidates' activities during the season is required, and his general personality, and his ability to profit by further study, is the final deciding factor.

The Provincial Government pays a bounty of \$5.00 for every bear killed in a district where it is a menace to livestock.

Forest fires have apparently driven these animals nearer to the settled parts of the country, for so far this year \$8,945.00 has been paid representing bounties on 1789 bears.

Mr. J. Clifford McGee, who for the last year has been stationed at Drummondville as assistant agronomist, has been transferred to Huntingdon to take over the work of Mr. Peter Nadeau who is on the War Prices Board at Ottawa.

Mr. Hermas Lajoie, field man for the Holstein Breeders' Association, has been named secretary of the Association to succeed the late Roger Charbonneau.

SEED SUPPLY FOR 1942

Detailed reports from Ottawa indicate that for Canada as a whole the available supply of alfalfa and clover is sufficient to meet the demands of next year's seeding, but that there will be a shortage of timothy seed. About half our requirements of this seed will have to be imported.

The table below shows the estimated production in 1941 and estimated requirements in pounds for next season for the whole country.

	1941	1942
	Production	Requirements
Alfalfa	6,847,000	3,000,000
Red Clover	5,311,000	4,000,000
Alsike	4,011,800	2,000,000
Timothy	4,045,000	8,000,000

Quebec officials anticipate a shortage in this province of seed of both clover and timothy, but do not anticipate any difficulty in securing the needed amounts for next spring's operations.



Preparing to blast on a drainage project at Napierville, June. 1941.

POULTRY GOES MODERN

Folks who live in the larger cities are peculiar. They are also practical, after a fashion, and some of their practical demands find their way back to the farm. Housewives who live in apartments or crowded city houses, cannot store much in the way of foodstuffs. Not all of them have refrigerators in which to keep food that is not required immediately. Consequently, they often buy in very small quantities and, in some cases, even a small chicken is too much for a city family to buy at one time.

As a result of this peculiarity of these people who do not possess farm storages and farm appetites, some of the larger stores have offered chicken portions, breasts, wings and backs, thighs, drumsticks, etc. at prices fixed according to the demand. Stores catering to this trade have reported increased business from people who otherwise would not be able to use chicken economically.



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MACDONALD COLLEGE QUEBEC

MODERN DAIRY FARMERS Cool Milk Electrically!

COOL MILK finds a steady market—dairies are continually searching for permanent, dependable sources of milk supply. Uncertainty about their producers is one of their most important problems. For this reason they are anxious to deal with dairy farmers upon whom they can depend for . . .

- A regular supply of high quality milk.
- Assurance that such milk will regularly pass their regulations, as to bacteria count, acidity, etc.

Modern dairy farmers find electrical Milk Coolers assure rapid cooling and steady low temperatures for storage. Bacteria count is held at a small amount and, with a clean dairy, high quality is maintained.



Merry Christmas

To all our friends

old friends whose work in field and barn for many years past has been made easier through the use of our products —

new friends, particularly those who are doing their bit toward the war effort by growing flax and are finding in Forano products machinery designed especially for their needs —

we extend the compliments of the season

And our New Year's wish is for HEALTH AND HAPPINESS—

Health to face the demands of the coming year when agriculture more than ever, will be in the forefront of our war effort—

Health to meet the extra demands that will be made on every farmer. most of whom will have to get along with less hired labour—

Happiness that comes with the knowledge of a job well done—

The directors and staff of the Plessisville Foundry.

THE PLESSISUILLE FOUNDRY * PLESSISUILLE - TORONTO - MONTREAL MAKERS OF FORANO PRODUCTS SINCE 1873